Appl. No. 10/581,434
Amdt. dated November 2, 2011
Reply to Office Action of August 2, 2011

PATENT

REMARKS/ARGUMENTS

Claims 14-15, 18, 20, 24, 28, and 33 are pending. Claims 14, 24, 28, and 33 are amended to correct typographical errors. No new matter is introduced by way of the Amendment. Claims 14-15, 18, 20, 24, 28 and 33 are rejected under 35 U.S.C. 103(a) as allegedly being obvious over Sekiguchi (US Patent 7,143,045), in view of Takagi et al. (US Patent 6,980,956). Reconsideration of the claims in view of the following remarks is respectfully requested.

According to Claim 14, the device control device can delete transition definition data indicating transition from one process item which has already been defined to another process item which has already been defined.

Furthermore, the device control device can add new transition definition data indicating transition from one undefined process item to another undefined process item. That is, the device control device can add not only transitions which were assumed in advance upon factory shipment, but also transitions which were not assumed in advance. The transition to be added is not limited. In other words, <u>any</u> new transition definition data can be added.

For example, exemplary embodiments of the invention, such as described in paragraphs 221 and 222, include the following features:

> *[0221] Further, as the connection relationships among the individual process items are defined by wires, wires can be easily added. In a case where the user frequently inputs a speech "find a family restaurant" with an intention to take a rest after a speech "hot" is input, for example, a wire is automatically added with respect to the search process item of a family restaurant. Then, after the wire is automatically added, it becomes possible to appropriately cope with the input "find a family restaurant" by increasing the weighting factor J of a wire connected to a family restaurant search process item to some extent (in this case, however, the agent processing unit 6 shall store map data or the like including, for example, information representing the location of a family restaurant, or access external map data or the like).*
> *[0222] The automatic addition of a wire may be automatically carried out when the number of jumps from one process item to another is counted and reaches a predetermined number.*

On the other hand, Takagi (US 6,980,956 B I) describes changing a transition probability from a preceding behavior, which was assumed in advance, to another behavior which was assumed in advance, but differs from the presently claimed feature of deleting an existent transition and adding a transition which was not assumed in advance.

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Moreover, in the equations in Col. 7, lines 26 and 36 of Takagi, cited in the Office Action, the variable "M+ 1" indicates the total number of behaviors which can be transferred from the preceding behavior. This means that the number of transitions is limited in Takagi. According to Takagi, the robot can change only transition probabilities corresponding to specific evaluations such as "praise" and "anger", and cannot change transition probabilities corresponding to a user's behaviors which were not assumed.

Additionally, in the matter according to Claim 14 of the present application, the number of following processes which can be transmitted from a preceding process is not limited. In other words, any new transition definition data can be added, and there can be an unlimited number of transition definition data. Consequently, the matter according to Claim 14 could not have been easily conceived by one of ordinary skill in the art.

Thus, Takagi neither discloses nor suggests at least the following features of claim 14:

"deleting said transition definition data thus defined when a product of said weighting factor thus changed and said likelihood does not reach a predetermined value" and

"adding new transition definition data indicating said transition when the number of transitions from one undefined process item to another undefined process item reaches a predetermined number."

The Office Action has cited Takagi as allegedly teaching:

> adding new transition definition data indicating said transition when the number of transitions from one undefined process to another undefined process item reaches a predetermined number (Col. 7 lines 32-37 referring to Eq. p'm=Pm-(P'o- Po)/M teach "P'm indicates the new transition probability" (i.e. a new transition definition data added), "and M+1 indicates the total number of behaviors transferred from the preceding behavior" (transition probability P'm is used or added tantamount to a predetermined number M signifying the number of behavior transitions from one undefined process to another beginning with the original behavior P'o till the robot reaches behavior or process identified by the index "M"); Col. 7 lines 38-42 teach: "newly computed transition probability P'o, P'1, ... , P'M, is provided for the behavior generation selection program module M02, and the transition probability of the probability automaton as a behavioral model is updated").

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However, these so-called "process items" are not "undefined." Quite on the contrary, "[w]hen the robot 1 starts the transition from a preceding behavior to another behavior (transition behavior), the CPU 20 starts the transition probability changing process, and determines in step S1 whether or not the transition from the transition behavior to the next behavior has been performed. (col. 6, lines 54-58). These behaviors therefore cannot be said to be "undefined process items" as claimed.

Still further, Takagi does not add new transition definition data indicating said transition when the number of transitions from one undefined process item to another undefined process item reaches a predetermined number. The "transition definition data" is claimed as "associat[ing] a discrimination condition with a weighting factor," and here, the Office Action is merely referring to updating a probability. Applicant respectfully asserts that the mere step of calculating a simple probability does not anticipate adding new data, where the data associates a discrimination condition with a weighting factor.

Takagi does not disclose or suggest "deleting said transition definition data thus defined when a product of said weighting factor thus changed and said likelihood does not reach a predetermined value" nor "adding new transition definition data indicating said transition when the number of transitions from one undefined process item to another undefined process item reaches a predetermined number," both of which are required by claim 14. Claim 14 is thus patentable over the cited references.

Independent claims 24, 28 and 33 include similar features, and are thus patentable over the cited references.

Dependent claims 15, 18 and 20 recite additional features of the invention which are considered independently patentable. These claims are further patentable due to their dependence on claim 14.
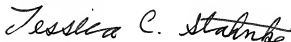
CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

Further, the Commissioner is hereby authorized to charge any additional fees or credit any overpayment in connection with this paper to Deposit Account No. 20-1430.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 415-273-7513 (direct dial).

Respectfully submitted,

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